



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/009,500
Source: _____
Date Processed by STIC: 6/6/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



PCT10

RAW SEQUENCE LISTING

DATE: 06/06/2002

PATENT APPLICATION: US/10/009,500

TIME: 14:28:17

Input Set : A:\merck 2332 seq list

Output Set: N:\CRF3\06062002\J009500.raw

Does Not comply
Corrected Diskette Needed

245

3 <110> APPLICANT: Merck Patent GmbH
 5 <120> TITLE OF INVENTION: Hyaluronidase from the Hirudinaria manillensis,
 6 isolation, purification and recombinant method of
 7 production
 9 <130> FILE REFERENCE: Manillase
 11 <140> CURRENT APPLICATION NUMBER: US/10/009,500
 12 <141> CURRENT FILING DATE: 2002-04-08
 14 <160> NUMBER OF SEQ ID NOS: 15
 16 <170> SOFTWARE: PatentIn Ver. 2.1

ERRORED SEQUENCES

258 <210> SEQ ID NO: 3
 259 <211> LENGTH: 488
 260 <212> TYPE: PRT
 261 <213> ORGANISM: Leech
 263 <400> SEQUENCE: 3
 264 Lys Glu Ile Ala Val Thr Ile Asp Asp Lys Asn Val Ile Ala Ser Ala
 265 1 5 10 15
 267 Ser Gly Ser Phe Leu Gly Val Ala Phe Asp Ala Ser Leu Phe Ser Pro
 268 20 25 30
 270 Lys Gly Leu Trp Ser Phe Val Asp Ile Thr Ser Pro Lys Leu Phe Lys
 271 35 40 45
 273 Leu Leu Glu Gly Leu Ser Pro Gly Tyr Phe Arg Val Gly Gly Thr Phe
 274 50 55 60
 276 Ala Asn Trp Leu Phe Phe Asp Leu Asp Glu Asn Asn Lys Trp Lys Asp
 277 65 70 75 80
 279 Tyr Trp Ala Phe Lys Asp Lys Thr Pro Glu Thr Ala Thr Ile Thr Arg
 280 85 90 95
 282 Arg Trp Leu Phe Arg Lys Gln Asn Asn Leu Lys Lys Glu Thr Phe Asp
 283 100 105 110
 285 Asn Leu Val Lys Leu Thr Lys Gly Ser Lys Met Arg Leu Leu Phe Asp
 286 115 120 125
 288 Leu Asn Ala Glu Val Arg Thr Gly Tyr Glu Ile Gly Lys Lys Met Thr
 289 130 135 140
 291 Ser Thr Trp Asp Ser Ser Glu Ala Glu Lys Leu Phe Lys Tyr Cys Val
 292 145 150 155 160
 294 Ser Lys Gly Tyr Gly Asp Asn Ile Asp Trp Glu Leu Gly Asn Glu Pro
 295 165 170 175
 297 Asp His Thr Ser Ala His Asn Leu Thr Glu Lys Gln Val Gly Glu Asp
 298 180 185 190
 300 Phe Lys Ala Leu His Lys Val Leu Glu Lys Tyr Pro Thr Leu Asn Lys

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307 225          230          235          240
E--> 309 His Gln Tyr Tyr Phe Asp Gly Asn Xaa Ser Asp Val Ser Ile Tyr Leu
310          245          250          255
312 Asp Ala Thr Tyr Phe Lys Lys Leu Gln Leu Phe Asp Lys Val Lys
313          260          265          270
315 Asp Val Leu Lys Asp Ser Pro His Lys Asp Glu Pro Leu Trp Leu Gly
316          275          280          285
318 Glu Thr Ser Ser Gly Tyr Asn Ser Gly Thr Glu Asp Val Ser Asp Arg
319          290          295          300
321 Tyr Val Ser Gly Phe Leu Thr Leu Asp Lys Leu Gly Leu Ser Ala Ala
322 305          310          315          320
324 Asn Asn Val Lys Val Val Ile Arg Gln Thr Ile Tyr Asn Gly Tyr Tyr
325          325          330          335
327 Gly Leu Leu Asp Lys Asn Thr Leu Glu Pro Asn Pro Asp Tyr Trp Leu
328          340          345          350
330 Met His Val His Asn Ser Leu Val Gly Asn Thr Val Phe Lys Val Asp
331          355          360          365
333 Val Ser Asp Pro Thr Asn Lys Ala Arg Val Tyr Ala Gln Cys Thr Lys
334          370          375          380
336 Thr Asn Ser Lys His Thr Gln Ser Arg Tyr Tyr Lys Gly Ser Leu Thr
337 385          390          395          400
339 Ile Phe Ala Leu Asn Val Gly Asp Gly Asp Val Thr Leu Lys Ile Gly
340          405          410          415
342 Gln Tyr Ser Gly Lys Lys Ile Tyr Ser Tyr Ile Leu Thr Pro Glu Gly
343          420          425          430
345 Gly Gln Leu Thr Ser Gln Lys Val Leu Leu Asn Gly Lys Glu Leu Asn
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352 465          470          475          480
354 Ala Asn Val Glu Ala Cys Lys Lys
355          485
498 <210> SEQ ID NO: 5
499 <211> LENGTH: 488
500 <212> TYPE: PRT
501 <213> ORGANISM: Leech
503 <400> SEQUENCE: 5
504 Lys Glu Ile Ala Val Thr Ile Asp Asp Lys Asn Val Ile Ala Ser Ala
505 1          5          10          15
507 Ser Glu Ser Phe His Gly Val Ala Phe Asp Ala Ser Leu Phe Ser Pro
508          20          25          30
510 Lys Gly Leu Trp Ser Phe Val Asp Ile Thr Ser Pro Lys Leu Phe Lys
511          35          40          45
513 Leu Leu Glu Gly Leu Ser Pro Gly Tyr Phe Arg Val Gly Gly Thr Phe

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see p. 5
for explanation
of Xaa

p4

RAW SEQUENCE LISTING

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514      50      55      60
516 Ala Asn Arg Leu Phe Phe Asp Leu Asp Glu Asn Asn Lys Trp Lys Asp
517 65      70      75      80
519 Tyr Trp Ala Phe Lys Asp Lys Thr Pro Glu Thr Ala Thr Ile Thr Arg
520      85      90      95
522 Arg Trp Leu Phe Arg Lys Gln Asn Asn Leu Lys Lys Glu Thr Phe Asp
523      100      105      110
525 Asn Leu Val Lys Leu Thr Lys Gly Ser Lys Met Arg Leu Leu Phe Asp
526      115      120      125
528 Leu Asn Ala Glu Val Arg Thr Gly Tyr Glu Ile Gly Lys Lys Met Thr
529      130      135      140
531 Ser Thr Trp Asp Ser Ser Glu Ala Glu Lys Leu Phe Lys Tyr Cys Val
532 145      150      155      160
534 Ser Lys Gly Tyr Gly Asp Asn Ile Asp Trp Glu Leu Gly Asn Gly Pro
535      165      170      175
537 Asp His Thr Ser Ala His Asn Leu Thr Glu Lys Gln Val Gly Glu Asp
538      180      185      190
540 Phe Lys Ala Leu His Lys Val Leu Glu Lys Tyr Pro Thr Leu Asn Lys
541      195      200      205
543 Gly Ser Leu Val Gly Pro Asp Val Gly Trp Met Gly Val Ser Tyr Val
544      210      215      220
546 Lys Gly Leu Ala Asp Glu Ala Gly Asp His Val Thr Ala Phe Thr Leu
547 225      230      235      240
549 His Gln Tyr Tyr Phe Asp Gly Asn Thr Ser Asp Val Ser Ile Tyr Leu
550      245      250      255
552 Asp Ala Thr Tyr Phe Lys Lys Leu Gln Gln Leu Phe Asp Lys Val Lys
553      260      265      270
555 Asp Val Leu Lys Asp Ser Pro His Lys Asp Lys Pro Leu Trp Leu Gly
556      275      280      285
558 Glu Thr Ser Ser Gly Tyr Asn Ser Gly Thr Glu Asp Val Ser Asp Arg
559      290      295      300
561 Tyr Val Ser Gly Phe Leu Thr Leu Asp Lys Leu Gly Leu Ser Ala Ala
562 305      310      315      320
564 Asn Asn Val Lys Val Val Ile Arg Gln Thr Ile Tyr Ser Gly Tyr Tyr
565      325      330      335
567 Gly Pro Leu Asp Lys Asn Thr Leu Glu Pro Asn Pro Asp Tyr Trp Leu
568      340      345      350
570 Met His Val His Asn Ser Leu Val Gly Asn Thr Val Phe Lys Val Asp
571      355      360      365
573 Val Ser Asp Pro Thr Asn Lys Ala Arg Val Tyr Ala Gln Cys Thr Lys
574      370      375      380
576 Thr Asn Ser Lys His Thr Gln Ser Arg Tyr Tyr Lys Gly Ser Leu Thr
577 385      390      395      400
579 Ile Phe Ala Leu Asn Val Gly Asp Glu Asp Val Thr Leu Lys Ile Gly
580      405      410      415
582 Gln Tyr Ser Gly Lys Lys Ile Tyr Ser Tyr Ile Leu Thr Pro Glu Gly
583      420      425      430
585 Gly Gln Leu Thr Ser Gln Lys Val Leu Leu Asn Gly Lys Glu Leu Asn
586      435      440      445

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E--> 588 Leu Xaa Ser Asp Gln Leu Pro Gln Leu Asn Ala Asp Glu Ser Lys Thr
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591 Ser Phe Thr Leu Ser Pro Lys Thr Phe Gly Phe Phe Val Val Ser Asp
592 465 470 475 480
594 Ala Asn Val Glu Ala Cys Lys Lys
595 485

200 P.5

VARIABLE LOCATION SUMMARY

DATE: 06/06/2002

PATENT APPLICATION: US/10/009,500

TIME: 14:28:18

Input Set : A:\merck 2332 seq list

Output Set: N:\CRF3\06062002\J009500.raw

Use of n's or Xaa's (NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.

in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:2; Xaa Pos. 223,231,236,249

Seq#:3; Xaa Pos. 223,231,236,249

Seq#:4; Xaa Pos. 450

Seq#:5; Xaa Pos. 450

VERIFICATION SUMMARY

DATE: 06/06/2002

PATENT APPLICATION: US/10/009,500

TIME: 14:28:18

Input Set : A:\merck 2332 seq list

Output Set: N:\CRF3\06062002\J009500.raw

L:11 M:270 C: Current Application Number differs, Replaced Application Number
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:186 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:672
L:190 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:720
L:194 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:768
L:303 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:3
M:340 Repeated in SeqNo=3
L:486 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:1392
L:588 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:5